

**Baseline Survey for
Astragalus barrii Barneby (Barr's Milkvetch)
and *Physaria didymocarpa* var. *lanata*
A. Nels (Woolly Twinpod) in Eastern
Big Horn and Southwestern Rosebud
Counties, Montana**

Prepared for:

The Bureau of Land Management

Prepared by:

Amy Taylor and Richard Caners

Montana Natural Heritage Program
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Prepared for :
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Executive Summary

In 2001, The Bureau of Land Management (BLM) Miles City Field Office contracted with the Montana Natural Heritage Program (MTNHP) to conduct baseline surveys for two species of Special Concern, *Astragalus barrii* Barneby (Barr's milkvetch) and *Physaria didymocarpa* var. *lanata* A. Nels. (woolly twinpod), in eastern Big Horn County and southwestern Rosebud County. Both of these species are regional endemics, their overall range being restricted to portions of adjacent Montana, Wyoming and South Dakota.

Both species are known to occur within the study area, but had not been systematically inventoried. Prior to this survey, *P. didymocarpa* var. *lanata* was known in Montana from only one location in Big Horn County, and had been documented from 14 occurrences in north-central Wyoming. *A. barrii* had previously been documented from 33 locations in southeastern Montana, and was known from South Dakota and Wyoming.

Surveys from this study resulted in four new occurrences of *P. didymocarpa* var. *lanata* and one new occurrence of *A. barrii* in the study area. Habitat information including associated plant species, and topographic and edaphic conditions was collected. This information provides additional baseline information for both species in Montana, and serves as a basis for BLM evaluation of the potential impacts of coal bed methane development on these plants and their habitats. The information found in this report may also help clarify the BLM status of these species, and will assist BLM staff with future field identification of both species and their respective habitats.